Remarks/Arguments

Summary of Disposition of the claims

Claims 1-30 were previously cancelled by preliminary amendment.

Claims 31-34 are currently pending in the application and are the subject of a restriction requirement. Elected claims 35-36 are rejected and non-elected claims 31-34 are withdrawn from consideration.

Applicants respectfully request cancellation of withdrawn claims 31-34 without prejudice to Applicants' right to pursue those claims in subsequent divisional applications.

Applicants respectfully request cancellation of rejected claim 35 without prejudice.

The rejection under 35 USC §112, first paragraph

The Examiner has rejected claims 35-36 under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have cancelled claim 35, thus obviating the rejection of this claim. Regarding the rejection of claim 36, Applicants respectfully disagree with the Examiner for the following reasons.

Applicants disclose on page 15, lines 23-26, "Since noggin is expressed in the branchial arch neural crest, we believe it may therefore influence whether neural crest cells deposit cartilage...".

On page 16, lines 17-23, Applicants disclose, "Because noggin has a pattern of expression that suggests it is used to regulate cartilage production in the embryonic head, clinical uses to regulate cartilage and bone growth are suggested for noggin in therapeutic compositions and particularly in combination with other growth factors due to a property of noggin to potentiate at least some growth factors."

Applicants disclose on page 36, lines 16-21, "Expression of noggin initiates at several new sites, which become progressively clearer as the tadpole matures. A discontinuous line of stained cells runs the length of the roof plate of the neural tube. Staining is also apparent in the head mesoderm, primarily in the mandibular and gill arches. We suspect that this expression corresponds to skeletogenic neural crest cells."

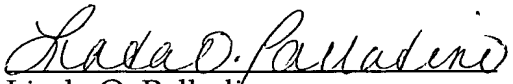
Together, these disclosures support Applicants assertion that noggin is involved in the regulation of cartilage deposit and skeletogenesis. In further support of Applicants assertions, attached herewith is Brunet, *et al.*, (1998) Noggin, Cartilage Morphogenesis, and Joint Formation in the Mammalian Skeleton, Science 280:1455-1457, which describes noggin's role in cartilage regulation and skeletogenesis. This paper provides independent

corroboration that Applicants assertions regarding noggin's role in cartilage regulation and skeletogenesis were in fact correct.

In light of the arguments set forth above and the supporting document attached herewith, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 36 under 35 USC §112, first paragraph.

No fee is deemed necessary in connection with filing this paper. However, if any fee is necessary, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 18-0650.

Respectfully submitted,



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